2006-08 ENGINE PERFORMANCE

EGR System (R18A1) - Civic (All Except Hybrid)

COMPONENT LOCATION INDEX

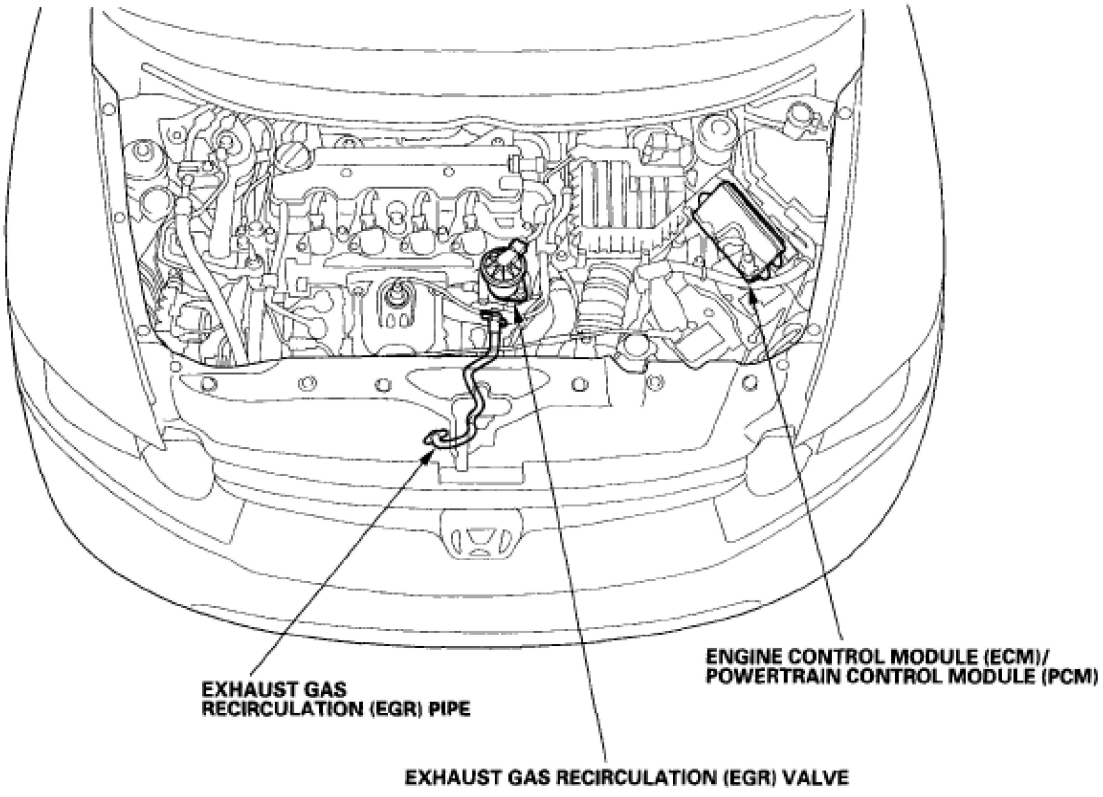

Fig. 1: Locating EGR System Components
Courtesy of AMERICAN HONDA MOTOR CO., INC.

DTC TROUBLESHOOTING

DTC P0400: EGR SYSTEM LEAK DETECTED

NOTE: Before you troubleshoot, record all freeze data and any on-board snapshot, and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Check for a loose or damaged EGR pipe.

Is the EGR pipe OK?

YES - Go to step 2.

NO - Reconnect or replace the EGR pipe, then go to step 7.

2. Start the engine. Hold the engine speed at 3,000 rpm without load (in Park or neutral) until the radiator fan comes on, then let it idle.
3. Test-drive under these conditions:
   - Engine coolant temperature (ECT SENSOR 1) above 158°F (70°C)
   - A/T in D position (M/T in 4th gear)
   - Vehicle speed at 25 mph (40 km/h) for 5 minutes or more
   - Maintain the vehicle speed at 32 mph (50 km/h) for 5 minutes or more with cruise control set
4. Monitor the OBD STATUS for DTC P0400 in the DTCs MENU with the HDS.

   Does the screen indicate FAILED?

   YES - Go to step 5.

   NO - If the screen indicates PASSED, intermittent failure, the system is OK at this time. Check for poor connections or loose terminals at the EGR valve and the ECM/PCM. If the screen indicates NOT COMPLETED, go to step 3 and recheck.

5. Turn the ignition switch OFF.
6. Replace the EGR valve (see **EGR VALVE REPLACEMENT**).
7. Turn the ignition switch ON (II).
8. Reset the ECM/PCM with the HDS.
9. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**).
10. Test-drive under these conditions:
    - Engine coolant temperature (ECT SENSOR 1) above 158°F (70°C)

- A/T in D position (M/T in 4th gear)
- Vehicle speed at 25 mph (40 km/h) for 5 minutes or more
- Maintain the vehicle speed at 32 mph (50 km/h) for 5 minutes or more with cruise control set

11. Check for Temporary DTCs or DTCs with the HDS.

    Is DTC P0400 indicated?

    YES - Check for poor connections or loose terminals at the EGR valve and the ECM/PCM, then go to step 1.

    NO - Go to step 12.

12. Monitor the OBD STATUS for DTC P0400 in the DTCs MENU with the HDS.

    Does the screen indicate PASSED?

    YES - Troubleshooting is complete. If any other Temporary DTCs or DTCs were indicated in step 11, go to the indicated DTCs troubleshooting.

    NO - If the screen indicates FAILED, check for poor connections or loose terminals at the EGR valve and the ECM/PCM, then go to step 1. If the screen indicates NOT COMPLETED, go to step 10.

DTC P0401: EGR INSUFFICIENT FLOW

NOTE: Before you troubleshoot, record all freeze data and any on-board snapshot, and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Start the engine. Hold the engine speed at 3,000 rpm without load (in Park or neutral) until the radiator fan comes on, then let it idle.

4. Do the EGR TEST in the INSPECTION MENU with the HDS.

   Is the result OK?

   YES - Go to step 5.

   NO - Go to step 7.

5. Test-drive under these conditions:
   - Engine coolant temperature (ECT SENSOR 1) above 158°F (70°C)
   - A/T in D position (M/T in 4th gear)
   - Drive at a steady speed between 55-75 mph (88-120 km/h) for at least 10 seconds
   - During the drive, decelerate (with the throttle fully closed) for 5 seconds
6. Monitor the OBD STATUS for DTC P0401 in the DTCs MENU with the HDS.

   Does the screen indicate FAILED?

   YES - Clean the intake manifold EGR port and EGR pipe (see **EGR VALVE REPLACEMENT**) with throttle plate and induction cleaner. Also, clean the passage inside the EGR valve with throttle plate and induction cleaner, then go to step 9.

   NO - If the screen indicates PASSED, intermittent failure, the system is OK at this time. Check for poor connections or loose terminals at the EGR valve and the ECM/PCM. If the screen indicates EXECUTING, keep driving until a result comes on. If the screen indicates OUT OF CONDITION, go to step 5 and recheck.

7. Turn the ignition switch OFF.
8. Replace the EGR valve (see **EGR VALVE REPLACEMENT**).
9. Turn the ignition switch ON (II).
10. Reset the ECM/PCM with the HDS.
11. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN**

PROCEDURE).

12. Test-drive under these conditions:
    - Engine coolant temperature (ECT SENSOR 1) above 158°F (70°C)
    - A/T in D position (M/T in 4th gear)
    - Drive at a steady speed between 55-75 mph (88-120 km/h) for at least 10 seconds
    - During the drive, decelerate (with the throttle fully closed) for 5 seconds
13. Check for Temporary DTCs or DTCs with the HDS.

    Is DTC P0401 indicated?

    YES - Check for poor connections or loose terminals at the EGR valve and the ECM/PCM. If the connections are OK, go to step 15.

    NO - Go to step 14.

14. Monitor the OBD STATUS for DTC P0401 in the DTCs MENU with the HDS.

    Does the screen indicate PASSED?

    YES - Troubleshooting is complete. If any other Temporary DTCs or DTCs were indicated in step 13, go to the indicated DTCs troubleshooting.

    NO - If the screen indicates FAILED, check for poor connections or loose terminals at the EGR valve and the ECM/PCM, then go to step 1. If the screen indicates EXECUTING, keep driving until a result comes on. If the screen indicates OUT OF CONDITION, go to step 12.

15. Update the ECM/PCM if it does not have the latest software (see **UPDATING ECM/PCM**), or substitute a known-good ECM/PCM (see **SUBSTITUTING THE ECM/PCM**).
16. Test-drive under these conditions:
    - Engine coolant temperature (ECT SENSOR 1) above 158°F (70°C)
    - A/T in D position (M/T in 4th gear)

- Drive at a steady speed between 55-75 mph (88-120 km/h) for at least 10 seconds
- During the drive, decelerate (with the throttle fully closed) for 5 seconds

17. Check for Temporary DTCs or DTCs with the HDS.

    Is DTC P0401 indicated?

    YES - Check for poor connections or loose terminals at the EGR valve and the ECM/PCM. If the ECM/PCM was updated, substitute a known-good ECM/PCM (see **SUBSTITUTING THE ECM/PCM**), then go to step 16. If the ECM/PCM was substituted, go to step 1.

    NO - Go to step 18.

18. Monitor the OBD STATUS for DTC P0401 in the DTCs MENU with the HDS.

    Does the screen indicate PASSED?

    YES - If the ECM/PCM was updated, troubleshooting is complete. If the ECM/PCM was substituted, replace the original ECM/PCM (see **ECM/PCM REPLACEMENT**). If any other Temporary DTCs or DTCs were indicated in step 17, go to the indicated DTCs troubleshooting.

    NO - If the screen indicates FAILED, check for poor connections or loose terminals at the EGR valve and the ECM/PCM. If the ECM/PCM was updated, substitute a known-good ECM/PCM (see **SUBSTITUTING THE ECM/PCM**), then go to step 16. If the ECM/PCM was substituted, go to step 1. If the screen indicates EXECUTING, keep driving until a result comes on. If the screen indicates OUT OF CONDITION, go to step 16.

DTC P0404: EGR VALVE CIRCUIT RANGE/PERFORMANCE PROBLEM

NOTE: Before you troubleshoot, record all freeze data and any on-board snapshot, and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Start the engine. Hold the engine speed at 3,000 rpm without load (in Park or neutral) until the radiator fan comes on, then let it idle.
4. Do the EGR TEST in the INSPECTION MENU with the HDS.

   Is the result OK?

   YES - Intermittent failure, the system is OK at this time. Clean any carbon build-up on the EGR valve with throttle plate and induction cleaner.

   NO - Go to step 5.

5. Turn the ignition switch OFF.
6. Disconnect the EGR valve 6P connector.
7. At the EGR valve side, measure resistance between EGR valve 6P connector terminals No. 1 and No. 2.

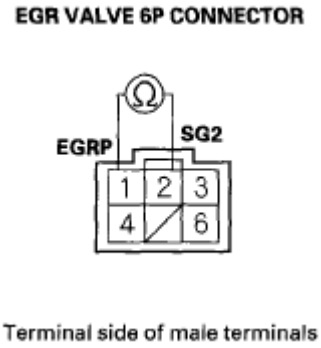

Fig. 2: Measuring Resistance Between EGR Valve 6P Connector Terminals No. 1 And No. 2
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there 100 kohms or more?

YES - Go to step 25.

NO - Go to step 8.

8. At the EGR valve side, measure resistance between EGR valve 6P connector terminals No. 1 and No. 3.

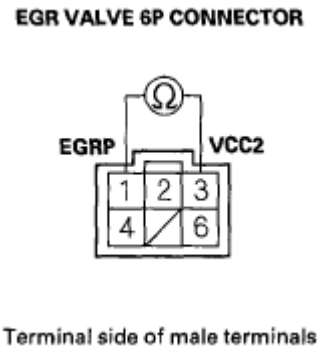

Fig. 3: Measuring Resistance Between EGR Valve 6P Connector Terminals No. 1 And No. 3
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there 100 k ohms or more?

YES - Go to step 25.

NO - Go to step 9.

9. Check for continuity between EGR valve 6P connector terminal No. 6 and body ground.

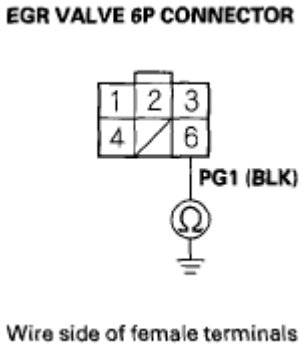

Fig. 4: Checking Continuity Between EGR Valve 6P Connector Terminal No. 1 And No. 3
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 10.

NO - Repair open in the wire between the EGR valve and G101; A/T model (see **CONNECTOR TO HARNESS INDEX**), M/T model (see **CONNECTOR TO HARNESS INDEX**), then go to step 26.

10. Jump the SCS line with the HDS.
11. Disconnect ECM/PCM connector B (44P).
12. Check for continuity between ECM/PCM connector terminal B2 and body ground.

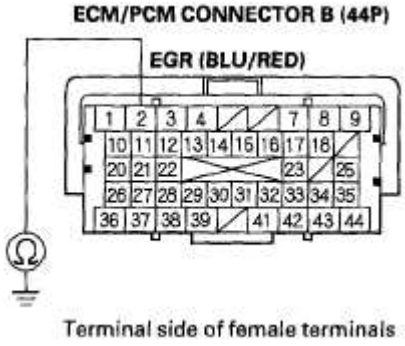

Fig. 5: Checking Continuity Between ECM/PCM Connector Terminal B2 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the ECM/PCM (B2) and the EGR valve, then go to step 26.

NO - Go to step 13.

13. Check for continuity between ECM/PCM connector terminal B2 and EGR valve 6P connector terminal No. 4.

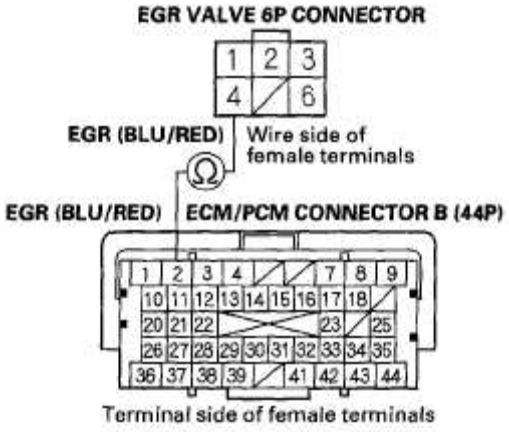
EGR VALVE 6P CONNECTOR
1 2 3
4 6
EGR (BLU/RED)
Wire side of female terminals
EGR (BLU/RED)
ECM/PCM CONNECTOR B (44P)
1 2 3 4 7 8 9
10 11 12 13 14 15 16 17 18
20 21 22 23 25
26 27 28 29 30 31 32 33 34 35
36 37 38 39 41 42 43 44
Terminal side of female terminals

Fig. 6: Checking Continuity Between ECM/PCM Connector Terminal B2 And EGR Valve 6P Connector Terminal No. 4
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 14.

NO - Repair open in the wire between the ECM/PCM (B2) and the EGR valve, then go to step 26.

14. Remove the EGR valve (see **EGR VALVE REPLACEMENT**).
15. Clean the intake manifold EGR port and the EGR pipe (see **EGR VALVE REPLACEMENT**) with throttle plate and induction cleaner. Also, clean the passage inside the EGR valve with throttle plate and induction cleaner.
16. Install the EGR valve (see **EGR VALVE REPLACEMENT**).
17. Reconnect the EGR valve 6P connector.
18. Reconnect ECM/PCM connector B (44P).
19. Turn the ignition switch ON (II).
20. Reset the ECM/PCM with the HDS.
21. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**).
22. Start the engine. Hold the engine speed at 3,000 rpm without load (in Park or neutral) until the radiator fan comes on, then let it idle.
23. Do the EGR TEST in the INSPECTION MENU with the HDS.

Is the result OK?

YES - Go to step 32.

NO - Go to step 24.

24. Turn the ignition switch OFF.
25. Replace the EGR valve (see **EGR VALVE REPLACEMENT**).
26. Reconnect all connectors.
27. Turn the ignition switch ON (II).
28. Reset the ECM/PCM with the HDS.
29. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**).
30. Start the engine. Hold the engine speed at 3,000 rpm without load (in Park or neutral) until the radiator fan comes on, then let it idle.
31. Do the EGR TEST in the INSPECTION MENU with the HDS.
32. Check for Temporary DTCs or DTCs with the HDS.

Is DTC P0404 indicated?

YES - Check for poor connections or loose terminals at the EGR valve and the ECM/PCM, then go to step 1. If the connections and terminals are OK, go to step 34.

NO - Go to step 33.

33. Monitor the OBD STATUS for DTC P0404 in the DTCs MENU with the HDS.

Does the screen indicate PASSED?

YES - Troubleshooting is complete. If any other Temporary DTCs or DTCs were indicated in step 32, go to the indicated DTCs troubleshooting.

NO - If the screen indicates FAILED, go to step 1 and recheck. If the screen indicates EXECUTING, keep idling until a result comes on. If the screen

indicates OUT OF CONDITION, go to step 30.

34. Update the ECM/PCM if it does not have the latest software (see **UPDATING ECM/PCM**), or substitute a known-good ECM/PCM (see **SUBSTITUTING THE ECM/PCM**).
35. Start the engine. Hold the engine speed at 3,000 rpm without load (in Park or neutral) until the radiator fan comes on, then let it idle.
36. Do the EGR TEST in the INSPECTION MENU with the HDS.
37. Check for Temporary DTCs or DTCs with the HDS.

    Is DTC P0404 indicated?

    YES - Check for poor connections or loose terminals at the EGR valve and the ECM/PCM. If the ECM/PCM was updated, substitute a known-good ECM/PCM (see **SUBSTITUTING THE ECM/PCM**), then go to step 35. If the ECM/PCM was substituted, go to step 1.

    NO - Go to step 38.

38. Monitor the OBD STATUS for DTC P0404 in the DTCs MENU with the HDS.

Does the screen indicate PASSED?

YES - If the ECM/PCM was updated, troubleshooting is complete. If the ECM/PCM was substituted, replace the original ECM/PCM (see **ECM/PCM REPLACEMENT**). If any other Temporary DTCs or DTCs were indicated in step 37, go to the indicated DTCs troubleshooting.

NO - If the screen indicates FAILED, check for poor connections or loose terminals at the EGR valve and the ECM/PCM. If the ECM/PCM was updated, substitute a known-good ECM/PCM (see **SUBSTITUTING THE ECM/PCM**), then go to step 35. If the ECM/PCM was substituted, go to step 1. If the screen indicates EXECUTING, keep idling until a result comes on. If the screen indicates OUT OF CONDITION, go to step 35.

DTC P0406: EGR VALVE POSITION SENSOR CIRCUIT HIGH VOLTAGE

NOTE: Before you troubleshoot, record all freeze data and any on-board snapshot, and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Turn the ignition switch ON (II).
2. Check EGR VLS in the DATA LIST with the HDS. Is 4.88 V or more indicated?

   YES - Go to step 3.

   NO - Intermittent failure, the system is OK at this time. Check for poor connections or loose terminals at the EGR valve and the ECM/PCM.

3. Turn the ignition switch OFF.
4. Disconnect the EGR valve 6P connector.
5. Turn the ignition switch ON (II).
6. Measure voltage between EGR valve 6P connector terminals No. 2 and No. 3.

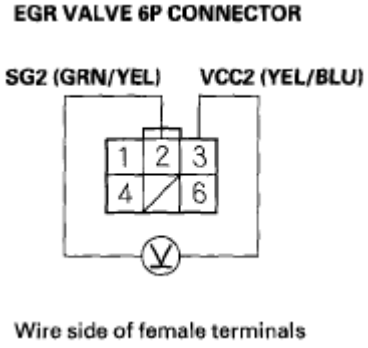

Fig. 7: Measuring Voltage Between EGR Valve 6P Connector Terminals No. 2 And No. 3
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Go to step 11.

NO - Go to step 7

7. Turn the ignition switch OFF.
8. Jump the SCS line with the HDS.
9. Disconnect ECM/PCM connector B (44P).
10. Check for continuity between EGR valve 6P connector terminal No. 2 and ECM/PCM connector terminal B33.

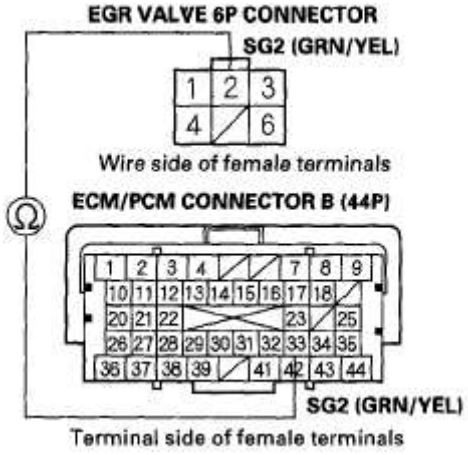
EGR VALVE 6P CONNECTOR
SG2 (GRN/YEL)
1 2 3
4 6
Wire side of female terminals
ECM/PCM CONNECTOR B (44P)
1 2 3 4 7 8 9
10 11 12 13 14 15 16 17 18
20 21 22 23 25
26 27 28 29 30 31 32 33 34 35
36 37 38 39 41 42 43 44
SG2 (GRN/YEL)
Terminal side of female terminals

Fig. 8: Checking Continuity Between EGR Valve 6P Connector Terminal No. 2 And ECM/PCM Connector Terminal B33
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 18.

NO - Repair open in the wire between the ECM/PCM (B33) and the EGR valve, then go to step 13.

11. Turn the ignition switch OFF.
12. Replace the EGR valve (see **EGR VALVE REPLACEMENT**).
13. Reconnect all connectors.
14. Turn the ignition switch ON (II).
15. Reset the ECM/PCM with the HDS.
16. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**).

17. Check for Temporary DTCs or DTCs with the HDS.

    Is DTC P0406 indicated?

    YES - Check for poor connections or loose terminals at the EGR valve and the ECM/PCM, then go to step 1.

    NO - Troubleshooting is complete. If any other Temporary DTCs or DTCs are indicated, go to the indicated DTCs troubleshooting.

18. Reconnect all connectors.
19. Update the ECM/PCM if it does not have the latest software (see **UPDATING ECM/PCM**), or substitute a known-good ECM/PCM (see **SUBSTITUTING THE ECM/PCM**).
20. Check for Temporary DTCs or DTCs with the HDS.

    Is DTC P0406 indicated?

    YES - Check for poor connections or loose terminals at the EGR valve and the ECM/PCM. If the ECM/PCM was updated, substitute a known-good ECM/PCM (see **SUBSTITUTING THE ECM/PCM**), then recheck. If the ECM/PCM was substituted, go to step 1.

    NO - If the ECM/PCM was updated, troubleshooting is complete. If the ECM/PCM was substituted, replace the original ECM/PCM (see **ECM/PCM REPLACEMENT**). If any other Temporary DTCs or DTCs are indicated, go to the indicated DTCs troubleshooting.

DTC P2413: EGR SYSTEM MALFUNCTION

NOTE: Before you troubleshoot, record all freeze data and any on-board snapshot, and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.

3. Start the engine. Hold the engine speed at 3,000 rpm without load (in Park or neutral) until the radiator fan comes on, then let it idle.
4. Do the EGR TEST in the INSPECTION MENU with the HDS.

   Is the result OK?

   YES - Intermittent failure, the system is OK at this time. Check for poor connections or loose terminals at the EGR valve and the ECM/PCM.

   NO - Go to step 5.

5. Turn the ignition switch OFF.
6. Turn the ignition switch ON (II).
7. Check the EGR VLS in the DATA LIST with the HDS.

   Is about 0 V indicated?

   YES - Go to step 8.

   NO - Go to step 21.

8. Turn the ignition switch OFF.
9. Disconnect the EGR valve 6P connector.
10. Turn the ignition switch ON (II).
11. Measure voltage between EGR valve 6P connector terminal No. 3 and body ground.

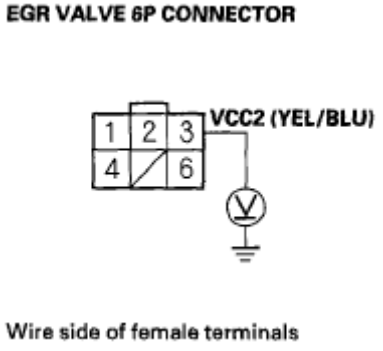

Fig. 9: Measuring Voltage Between EGR Valve 6P Connector Terminal

No. 3 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Go to step 16.

NO - Go to step 12.

12. Turn the ignition switch OFF.
13. Jump the SCS line with the HDS.
14. Disconnect ECM/PCM connector B (44P).
15. Check for continuity between ECM/PCM connector terminal B18 and EGR valve 6P connector terminal No. 3.

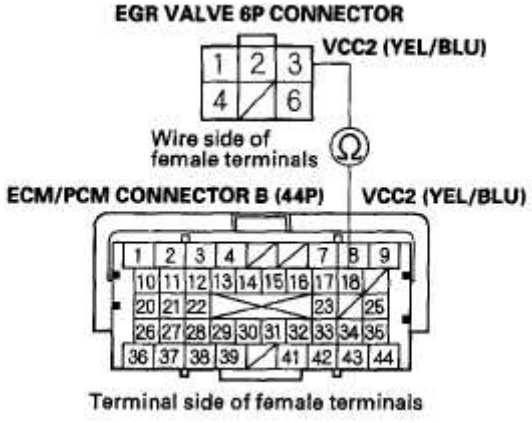
EGR VALVE 6P CONNECTOR
VCC2 (YEL/BLU)
1 2 3
4 6
Wire side of female terminals
ECM/PCM CONNECTOR B (44P)
VCC2 (YEL/BLU)
1 2 3 4 7 8 9
10 11 12 13 14 15 16 17 18
20 21 22 23 25
26 27 28 29 30 31 32 33 34 35
36 37 38 39 41 42 43 44
Terminal side of female terminals

Fig. 10: Checking Continuity Between ECM/PCM Connector Terminal B18 And EGR Valve 6P Connector Terminal No. 3
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 51.

NO - Repair open in the wire between the EGR valve and the ECM/PCM (B18), then go to step 44.

16. Turn the ignition switch OFF.

17. Jump the SCS line with the HDS.
18. Disconnect ECM/PCM connector B (44P).
19. Check for continuity between ECM/PCM connector terminal B29 and body ground.

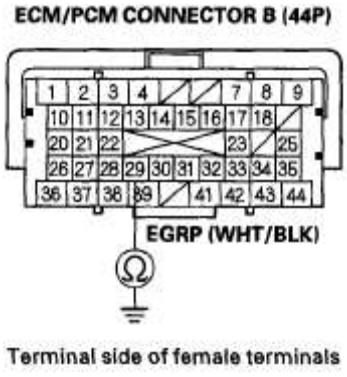

Fig. 11: Checking Continuity Between ECM/PCM Connector Terminal B29 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the ECM/PCM (B29) and the EGR valve, then go to step 44.

NO - Go to step 20.

20. Check for continuity between ECM/PCM connector terminal B29 and EGR valve 6P connector terminal No. 1.

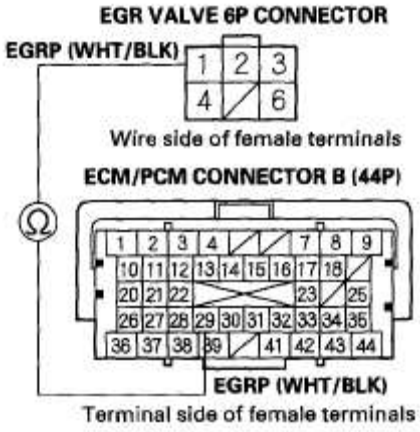
EGR VALVE 6P CONNECTOR
EGRP (WHT/BLK)
1 2 3
4 6
Wire side of female terminals
ECM/PCM CONNECTOR B (44P)
1 2 3 4 7 8 9
10 11 12 13 14 15 16 17 18
20 21 22 23 25
26 27 28 29 30 31 32 33 34 35
36 37 38 39 41 42 43 44
EGRP (WHT/BLK)
Terminal side of female terminals

Fig. 12: Checking Continuity Between ECM/PCM Connector Terminal B29 And EGR Valve 6P Connector Terminal No.1
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 21.

NO - Repair open in the wire between the ECM/PCM (B29) and the EGR valve, then go to step 44.

21. Turn the ignition switch OFF.
22. If not already done, disconnect the EGR valve 6P connector.
23. At the EGR valve side, measure resistance between EGR valve 6P connector terminals No. 1 and No. 2.

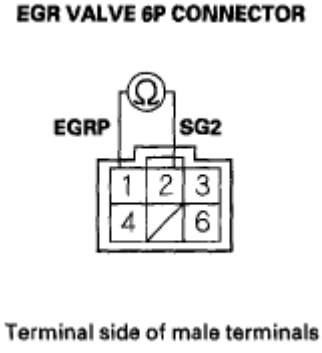

Fig. 13: Measuring Resistance Between EGR Valve 6P Connector Terminals No. 1 And No. 2

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there 100 kohms or more?

YES - Go to step 43.

NO - Go to step 24.

24. At the EGR valve side, measure resistance between EGR valve 6P connector terminals No. 1 and No. 3.

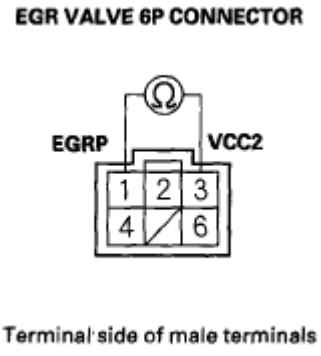

Fig. 14: Measuring Resistance Between EGR Valve 6P Connector Terminals No. 1 And No. 3.
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there 100 kohms or more?

YES - Go to step 43.

NO - Go to step 25.

25. If not already done, jump the SCS line with the HDS.
26. If not already done, disconnect ECM/PCM connector B (44P).
27. Check for continuity between ECM/PCM connector terminal B2 and body ground.

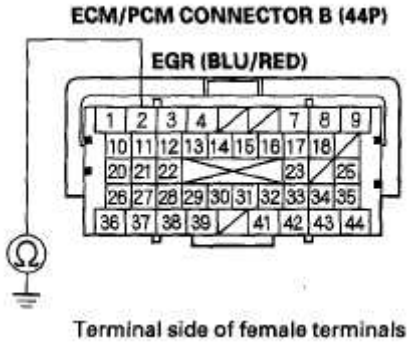

Fig. 15: Checking For Continuity Between ECM/PCM Connector Terminal B2 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the ECM/PCM (B2) and the EGR valve, then go to step 44.

NO - Go to step 28.

28. Check for continuity between ECM/PCM connector terminal B2 and EGR valve 6P connector terminal No. 4.

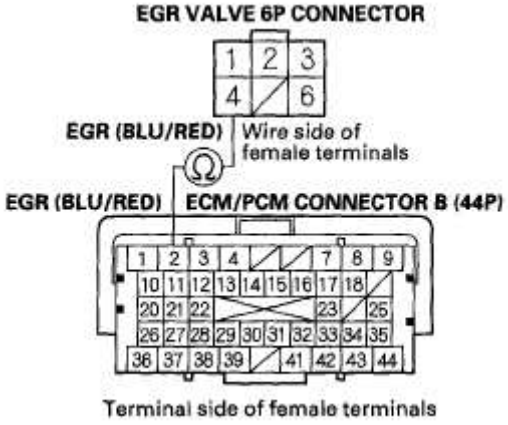

Fig. 16: Checking Continuity Between ECM/PCM Connector Terminal B2 And EGR Valve 6P Connector Terminal 4
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 29.

NO - Repair open in the wire between the ECM/PCM (B2) and the EGR valve, then go to step 44.

29. Check for continuity between EGR valve 6P connector terminal No. 6 and body ground.

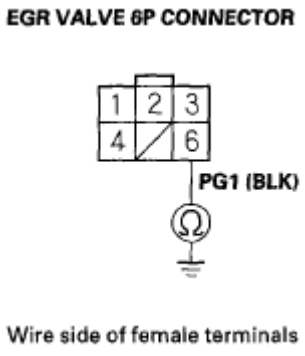

Fig. 17: Checking Continuity Between EGR Valve 6P Connector Terminal No. 6 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 30.

NO - Repair open in the wire between the EGR valve and G101; A/T model (see **CONNECTOR TO HARNESS INDEX**), M/T model (see **CONNECTOR TO HARNESS INDEX**), then go to step 44.

30. Reconnect ECM/PCM connector B (44P).
31. Connect the battery positive terminal to EGR valve 6P connector terminal No. 4 with a jumper wire.

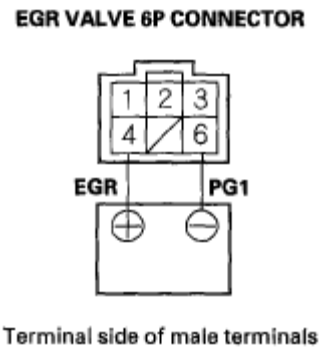

Fig. 18: Connecting Battery Positive Terminal To EGR Valve 6P Connector Terminal No. 4 With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

32. Start the engine, and let it idle. Then connect the battery negative terminal to EGR valve 6P connector terminal No. 6 with a jumper wire.

    Does the engine stall or run roughly?

    YES - Go to step 51.

    NO - Go to step 33.

33. Turn the ignition switch OFF.
34. Remove the EGR valve (see **EGR VALVE REPLACEMENT**).
35. Clean the intake manifold EGR port and the EGR pipe (see **EGR VALVE REPLACEMENT**) with throttle plate and induction cleaner. Also, clean the passage inside the EGR valve with throttle plate and induction cleaner.
36. Install the EGR valve (see **EGR VALVE REPLACEMENT**).
37. Reconnect all connectors.
38. Turn the ignition switch ON (II).
39. Reset the ECM/PCM with the HDS.
40. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**).
41. Do the EGR TEST in the INSPECTION MENU with the HDS.

    Is the result OK?

YES - Go to step 49.

NO - Go to step 42.

42. Turn the ignition switch OFF.
43. Replace the EGR valve (see **EGR VALVE REPLACEMENT**).
44. Reconnect all connectors.
45. Turn the ignition switch ON (II).
46. Reset the ECM/PCM with the HDS.
47. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**).
48. Do the EGR TEST in the INSPECTION MENU with the HDS.
49. Check for Temporary DTCs or DTCs with the HDS.

    Is DTC P2413 indicated?

    YES - Check for poor connections or loose terminals at the EGR valve and the ECM/PCM, then go to step 1.

    NO - Go to step 50.

50. Monitor the OBD STATUS for DTC P2413 in the DTCs MENU with the HDS.

    Does the screen indicate PASSED?

    YES - Troubleshooting is complete. If any other Temporary DTCs or DTCs were indicated in step 49, go to the indicated DTCs troubleshooting.

    NO - If the screen indicates FAILED, go to step 1 and recheck. If the screen indicates EXECUTING, keep idling until a result comes on. If the screen indicates OUT OF CONDITION, go to step 47.

51. Turn the ignition switch OFF.
52. Reconnect all connectors.
53. Update the ECM/PCM if it does not have the latest software (see **UPDATING**

ECM/PCM), or substitute a known-good ECM/PCM (see **SUBSTITUTING THE ECM/PCM**).

54. Do the EGR TEST in the INSPECTION MENU with the HDS.
55. Check for Temporary DTCs or DTCs with the HDS.

    Is DTC P2413 indicated?

    YES - Check for poor connections or loose terminals at the EGR valve and the ECM/PCM. If the ECM/PCM was updated, substitute a known-good ECM/PCM (see **SUBSTITUTING THE ECM/PCM**), then go to step 54. If the ECM/PCM was substituted, go to step 1.

    NO - Go to step 56.

56. Monitor the OBD STATUS for DTC P2413 in the DTCs MENU with the HDS.

    Does the screen indicate PASSED?

    YES - If the ECM/PCM was updated, troubleshooting is complete. If the ECM/PCM was substituted, replace the original ECM/PCM (see **ECM/PCM REPLACEMENT**). If any other Temporary DTCs or DTCs were indicated in step 55, go to the indicated DTCs troubleshooting.

    NO - If the screen indicates FAILED, check for poor connections or loose terminals at the EGR valve and the ECM/PCM. If the ECM/PCM was updated, substitute a known-good ECM/PCM (see **SUBSTITUTING THE ECM/PCM**), then go to step 54. If the ECM/PCM was substituted, go to step 1. If the screen indicates EXECUTING, keep idling until a result comes on. If the screen indicates OUT OF CONDITION, go to step 54.

EGR VALVE REPLACEMENT

1. Remove the injector cover (see step 8 in **ENGINE REMOVAL**).
2. Disconnect the EGR valve 6P connector (A).

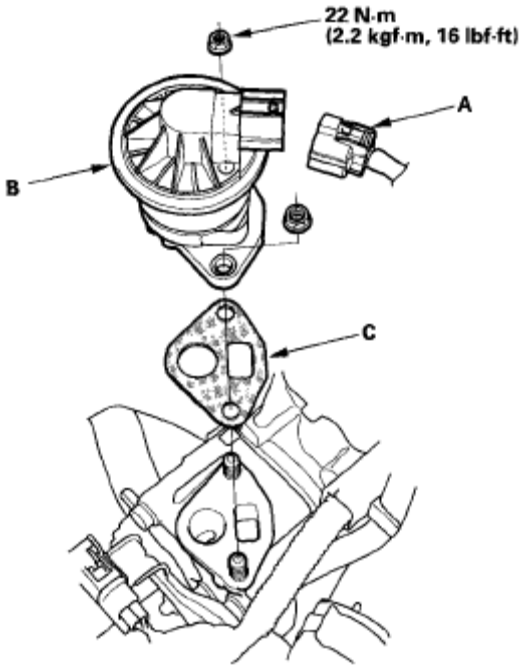

Fig. 19: Disconnecting EGR Valve 6P Connector (With Specifications)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the EGR valve (B).
4. Install the parts in the reverse order of removal with a new gasket (C).
5. Install the injector cover (see step 48 in **ENGINE INSTALLATION**).

EGR PIPE REPLACEMENT

REMOVAL

1. Remove the bolts (A) and nuts (B).

Fig. 20: Removing EGR Pipe Bolts And Nuts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Remove the EGR pipe (C).

INSTALLATION

1. Install the EGR pipe on the water passage side, and tighten the nuts (A) by hand with a new gasket (B).

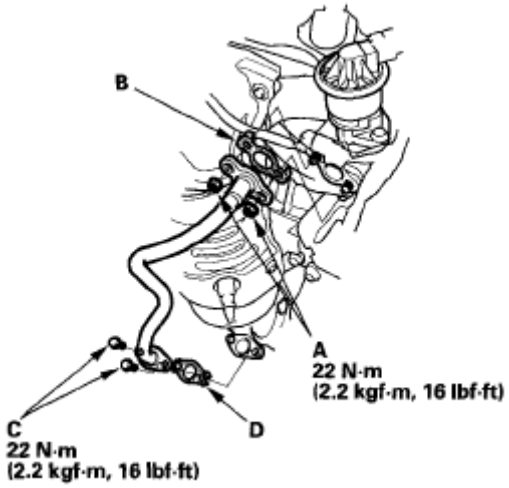

Fig. 21: Installing EGR Pipe On Water Passage Side (With Specifications)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Install the EGR pipe on the TWC side, and tighten the bolts (C) with a new gasket (D).
3. Tighten the nuts on the water passage side.